

V D F A C T S H E E T

INCIDENCE - The number of cases occurring in a stated area during a specific time period, usually one year.

TABLE I  
SYPHILIS MINIMUM ANNUAL INCIDENCE ESTIMATES  
1936 - 1947

Year	Method of Calculation	Civilians & Armed Forces			Continental U.S. Civilians		
		Total	Acquired	Con- genital	Total	Acquired	Con- genital
1936-37	Survey	---	---	---	---	259,000	---
1940-41	Survey	---	---	---	---	173,000	---
1941	Morbidity Reports	202,000	184,000	18,000	195,000	177,000	18,000
1942	"	223,000	206,000	17,000	209,000	192,000	17,000
1943	"	276,000	260,000	16,000	247,000	231,000	16,000
1944	"	259,000	245,000	14,000	215,000	201,000	14,000
1945	"	246,000	234,000	12,000	190,000	178,000	12,000
1946	"	263,000	251,000	12,000	214,000	202,000	12,000
1947	"	260,000	248,000	12,000	230,000	218,000	12,000

Gonorrhoea incidence is estimated as approximately five times the syphilis incidence.

PREVALENCE - The total number of cases of a disease existing in a stated area at any point of time.

1. In the first two million selectees examined, the prevalence rate for syphilis based on serologic testing was 45.3 per 1,000 men tested, the rate for white males was 17.4 per 1,000; for non-white males 252.3 per 1,000.
2. In the age group 20-25 years the prevalence rate among non-white males was 19 times greater than among white males. In the 30-35 year age group the prevalence rate among non-white males was only 9 times greater than among white males (see following table):

USPHS - Venereal Disease Division  
Office of Statistics

## PREVALENCE (continued)

TABLE II

## SYPHILIS DETECTED IN SELECTIVE SERVICE EXAMINATIONS

Age Group	Prevalence Rate per 1000 tested		
	White	Non-white	Total
21-25	10.1	191.2	30.1
26-30	20.9	293.7	54.4
31-35	37.7	357.2	83.2
Total	17.4	252.3	45.3

3. The prevalence of syphilis among examined contacts of primary-secondary syphilis is approximately 51 percent for whites and 60 percent for non-whites.

4. It is estimated that about 3 million persons in the United States have syphilis.

## MORBIDITY

TABLE III

DIAGNOSED CASES OF VENEREAL DISEASES REPORTED FOR THE FIRST TIME,  
FISCAL YEARS 1941-47  
(Known military cases are excluded.)

Year	Syphilis					Gonor- rhea	Other Venereal Diseases		
	Primary and sec- ondary	Early latent	Late and late latent	Congen- ital	Not stated		Chan- croid <sup>1</sup>	Granu- loma in- guinale	Lympho- granu- loma ve- nereum
In States and Territories									
1941	68,319	108,864	201,939	17,952	83,252	193,032	3,278	648	1,347
1942	78,556	118,300	206,472	18,921	62,159	218,554	5,649	1,278	1,915
1943	84,629	150,703	256,908	17,942	65,915	280,923	8,502	1,750	2,408
1944	80,316	125,379	208,830	15,707	42,493	307,504	8,029	1,771	2,905
1945	78,649	104,930	146,475	14,730	23,365	293,694	5,623	1,869	2,699
1946	96,222	110,652	129,080	14,181	20,767	372,594	7,333	2,216	2,643
1947 <sup>2</sup>	113,000	109,000	126,000	14,000	27,000	432,000	9,200	2,500	2,700
In continental United States									
1941	67,958	108,658	201,190	17,592	82,443	191,306	3,265	647	1,345
1942	75,704	116,433	202,216	16,924	60,968	212,384	5,426	1,271	1,888
1943	82,230	148,909	252,995	16,173	64,611	275,648	8,333	1,746	2,391
1944	78,418	122,390	203,396	13,576	40,419	300,585	7,861	1,758	2,857
1945	77,007	101,135	142,731	12,339	23,103	284,994	5,481	1,846	2,625
1946	94,957	107,336	125,836	12,106	20,683	364,853	7,058	2,204	2,593
1947 <sup>2</sup>	112,000	106,000	124,000	12,000	27,000	424,000	8,900	2,500	2,700

<sup>1</sup>/ Includes some unspecified "other venereal diseases."

<sup>2</sup>/ Estimated on the basis of reports for the first half of fiscal year.

## MORBIDITY (continued)

TABLE IV

TREND OF SYPHILIS<sup>1/</sup> MORBIDITY REPORTING, U.S. CIVILIANS AND ARMED FORCES  
1941 - 1947

Fiscal Year	Est. Pop. in Thousands <sup>2/</sup>	Reported Cases				Rate per 1,000 Population			
		Primary or Secondary	All Syphilis (Pri-Sec-E.L.)	Early Syphilis	Congenital	Late and Latent	Primary or Secondary	All Syphilis (Pri-Sec-E.L.)	Con-Genital
Continental U.S. Civilians									
1941	131,297	67,958	176,616	17,592	201,190	.515	1.339	.133	1.525
1942	131,943	75,704	192,137	16,924	202,216	.574	1.456	.128	1.533
1943	128,723	82,230	231,139	16,173	252,995	.639	1.796	.126	1.965
1944	127,028	78,418	200,808	13,576	203,396	.617	1.581	.107	1.601
1945	127,037	77,007	178,142	12,339	142,731	.606	1.402	.097	1.124
1946	133,543	94,957	202,293	12,106	125,836	.711	1.515	.091	0.942
1947 <sup>3/</sup>	140,018	112,000	218,000	12,000	124,000	.800	1.557	.086	0.886
Total Civilian and Armed Forces									
1941	132,638	74,764	183,422	17,592	201,190	.564	1.383	.133	1.517
1942	133,953	89,845	206,278	16,924	202,216	.671	1.540	.126	1.510
1943	135,646	111,333	260,242	16,173	252,995	.821	1.919	.118	1.865
1944	137,368	122,166	244,556	13,576	203,396	.889	1.780	.099	1.481
1945	138,923	132,532	233,667	12,339	142,731	.954	1.682	.089	1.027
1946	140,387	143,570	250,906	12,106	125,836	1.023	1.787	.086	0.896
1947 <sup>3/</sup>	142,000	142,000	248,000	12,000	124,000	1.000	1.746	.055	0.873

<sup>1/</sup> Excluding syphilis reported as stage "unknown".  
<sup>2/</sup> As of January 1 (mid-point of fiscal year).  
<sup>3/</sup> Estimated.

The color and sex of patients and source of report are shown in the following detailed table for July-September 1946 (first quarter of fiscal year 1947.)

## MORBIDITY (continued)

TABLE V

CASES REPORTED UNDER TREATMENT FOR THE FIRST TIME - U.S. AND TERRITORIES

July - September 1946

Source	Color & Sex	Syphilis					Gonor- rhea	Chan- croid	Granu- loma Ingui- nale	Lympho- granu- loma
		Pri- & Sec.	Early & Latent	Late & Latent	Con- geni- tal	Not Stated				
Pri- vate Physi- cians	White & -Male	2,876	1,526	4,191	214	1,148	10,962	90	27	5
	Unknown -Female	2,201	1,859	3,343	394	1,164	4,426	7	0	3
	Non- -Male	1,961	1,702	2,675	108	988	8,190	43	72	37
	white -Female	2,205	3,232	3,584	161	1,310	3,995	10	31	17
	TOTAL	9,243	8,319	14,293	877	4,610	27,573	150	130	62
Clinics Hospi- tals, or other Insti- tutions	White & -Male	4,861	2,722	3,817	524	402	18,413	417	14	38
	Unknown -Female	2,867	2,849	2,629	671	279	11,701	64	8	7
	Non- -Male	6,784	5,582	5,670	657	789	37,258	1,350	259	454
	white -Female	5,445	8,542	5,731	744	927	17,363	254	167	138
		19,947	19,695	17,847	2,596	2,397	84,735	2,085	448	637
	GRAND TOTAL	29,190	28,014	32,140	3,473	7,007	112,308	2,235	578	699

## MORTALITY AND INSANITY

TABLE VI

Year	Syphilis Mortality rates per 100,000 population	Infant Mortality rates due to syphilis per 1,000 live births	Admission rates to mental hospi- tals due to syp- hilis per 100,000 population
1933	15.1	.79	-
1934	15.9	.74	-
1935	15.4	.70	7.0
1936	16.2	.73	7.1
1937	16.1	.69	7.1
1938	15.9	.63	7.2
1939	15.0	.57	7.3
1940	14.4	.53	6.4
1941	13.3	.41	6.5
1942	12.2	.30	6.4
1943	12.1	.25	6.0
1944	11.3	.27	5.8
1945	10.7	.3	

MORTALITY AND INSANITY (continued)

TABLE VII

NUMBER OF DEATHS REPORTED AND NUMBER OF MENTAL HOSPITAL  
ADMISSIONS REPORTED TO SYPHILIS, 1944

	Total Deaths			Infant deaths	Mental hospital admissions
	Total	White	Non-white		
Syphilis-All Forms	14,916	9,415	5,501	746	7,727
Paresis	4,628	3,060	1,568		6,805
Tabes dorsalis	535	471	64		
Aortic aneurysm	2,807	1,977	830		
All other forms	6,946	3,907	3,039		1,122

MISCELLANEOUS FACTS - 75% of primary and secondary cases diagnosed by clinics are referred to in-patient facilities for treatment, 50% of primary and secondary cases reported by all sources are given in-patient treatment.

- About 2/3 of the primary and secondary cases diagnosed by clinics, volunteered for diagnostic observation. About 1/4 of the primary and secondary cases diagnosed by clinics are brought to treatment because of contact investigation.

- About 1/3 of the persons given diagnostic observation for venereal disease by clinics are found to be infected with one or more diseases.

- An average of one contact per patient is obtained from diagnosed primary and secondary cases by Health Departments.

- Contact investigation brings to treatment about 13 new early lesion cases per 100 early lesion cases diagnosed.

PENICILLIN IN THE TREATMENT OF SYPHILIS - Early Syphilis - Only 25 percent of patients with early syphilis admitted to clinics for routine therapy received the minimum protective regimen of 20 arsenical injections together with heavy metals.

Under present penicillin schedules for in-patients (ranging in duration from 4 to 14 days), 99 percent complete treatment.

## PENICILLIN IN THE TREATMENT OF SYPHILIS (continued)

TABLE VIII

COMPARATIVE EFFECTIVENESS OF PENICILLIN SCHEDULES  
IN THE TREATMENT OF SECONDARY SYPHILIS\*

Schedule of Penicillin Therapy	Results 12-15 months posttreatment			
	Total cases observed	Cumulative percent re-treated	Percent sero-positive	Percent sero-negative
100,000 units of penicillin plus 5 arsenoxide and 3 bismuth (9 days)	632	15	32	53
100,000 units penicillin in oil-eswax (8 days)	85	16	15	69
100,000 units of penicillin plus 320 g. arsenoxide (8 days)	415	16	16	68
100,000 units of penicillin (4 & 8 days)	418	21	17	62
100,000 units of penicillin (4 & 8 days)	697	23	17	60

From December 1946 report

TABLE IX

COMPARATIVE TOXICITY OF PENICILLIN ALONE AND PENICILLIN  
COMBINED WITH ARSENOXIDE\*

Treatment for Syphilis (all diagnoses)	Total Cases Reported	Severe Reactions per 1,000	Deaths
Penicillin alone	16,263	7.7	0
Penicillin plus arsenoxide	69,625	15.5	11

\* Based on reports from 36 rapid treatment centers from July 1946 through March 1947.

PENICILLIN IN THE TREATMENT OF SYPHILIS (continued)

Congenital Syphilis - There is a significantly greater percentage of patients with satisfactory progress among children treated at less than 6 months of age than among children treated at 6 months to two years of age or children treated at two years of age or over.

TABLE X

Age of Child at Time of Treatment	Satisfactory Progress 6 to 18 Months Posttreatment	Unsatisfactory Progress 6 to 18 Months Posttreatment
Less than 6 months	95.7 percent	4.3 percent
6 months - 1 year 11 months	75.0 "	25.0 "
2 years and over	61.4 "	38.6 "

Syphilis in Pregnancy - Penicillin therapy among pregnant syphilitic women is equally effective in preventing congenital syphilis when given in the third trimester as when given in the second or first trimester.

Penicillin therapy administered as late as the third trimester is more than seven times as effective as weekly injections of arsenicals and heavy metal started after the fifth month of pregnancy; more effective than routine injections of 10 or more arsphenamine and 10 or more heavy metal started before the fifth month.

TABLE XI

OUTCOME OF PREGNANCY BY GESTATION PERIOD  
AT TIME OF MOTHER'S TREATMENT

Duration of Pregnancy at Time of Mother's Treatment With Penicillin	Percent of Total Live Births		
	Congenital Syphilis	Non-Syphilitic	Indeterminate
Conception occurred after treatment			
First trimester	1.1	69.3	29.5
Second Trimester	3.3	80.0	16.7
Third Trimester	2.9	74.3	22.9
	3.5	78.9	17.5

PENICILLIN IN THE TREATMENT OF CONORRHEA

Two hour schedule - Na P aqueous

200,000 units dissolved in 6 cc. of water in three intramuscular injections:

0 hour	-	50,000 units (1.5 cc)
1 hour	-	50,000 units (1.5 cc)
2 hours	-	100,000 units (3 cc)

Cure\* - 94 percent

Three-hour schedule - Na P aqueous

200,000 units dissolved in 6 cc. of water in four intramuscular injections:

0 hour	-	40,000 units (1.2 cc)
1 hour	-	40,000 units (1.2 cc)
2 hours	-	40,000 units (1.2 cc)
3 hours	-	80,000 units (2.4 cc)

Cure\* - 96 percent

Single injection - Ca P in POB

200,000 units in peanut oil and 4.8% beeswax

Cure\* - 92 percent

\* Clinically and bacteriologically free of infection, i.e., without signs or symptoms and with three or more cultures - all negative - during the observation period.